Remarks

The present application is believed to be in an allowable condition for reasons discussed below.

Regarding the rejection of claim 12 under 35 U.S.C. 112, first paragraph, it is respectfully submitted that the tenser disc 88 identified in Figure 4 and also shown but unnumbered in Figure 1 provides the visual indicator to support this claim. This tenser disc 88 is discussed on page 7, lines 8-14 and page 8, line 15 to the end of the paragraph. Also, this latter description has been revised to correspond with the exact language of claim 12 while taking great care to make sure that no new matter has been added. Specifically, the specification previously stated that the rotation of the tenser disc "indicates" attainment of the desired tension which is clearly a visible indication as recited by the claim. As such, it is believed that this rejection of claim 12 has been overcome.

In regard to the rejection of claims 1-4 and 10-12 under 35 U.S.C. 112, second paragraph, claim 1 has been revised to define the invention as a fall arrest bottom anchor assembly for use with a substantially vertically-oriented elongate safety line. Furthermore, the manner in which the bottom anchor assembly is utilized with the safety line has been revised so that it is clear the safety line is not a claimed element. As such, it is respectfully submitted that this rejection has also been overcome.

Applicant also respectfully traverses the rejection of claims 1-4 and 12 under 35 U.S.C. 102(b) as being clearly anticipated by British patent specification 846096 David et al. As applicant has previously pointed out to the Examiner, the David et al. reference discloses a rope tensioning means that is utilized at the upper end of a guide rope used in mine elevators to provide a guiding function. The base plate 1 of David et al. is mounted on a "Kinging platform" as stated at page 2, line 18, and the rope R extends downwardly therefrom and is tensioned by a compression spring.

Claim 1 and hence all its dependent claims recite a fall arrest bottom anchor assembly for use with a substantially vertically-oriented elongate safety line. The bottom anchor assembly is recited as including a safety line gripper, a safety line tensioner, and a bracket that is adapted to be fixedly mounted. The gripper is recited as including a manually adjustable clamp that can be clamped to the safety line at an adjustable position, and the tensioner is recited as including a hollow shaft connected to the gripper and being adapted to receive the safety line with the safety line extending "upwardly" therefrom. Furthermore, the hollow shaft is recited as having an externally screw-threaded portion including a load setter threadingly adjustable thereon and adapted to bear against the "underside" of the fixed bracket for adjusting the safety line tension to a predetermined value.

The David et al. patent does not teach or in any way suggest a fall arrest bottom anchor assembly constructed as recited and utilized with a bracket against whose underside a load setter bears to provide tensioning at the bottom end of a safety line. As Applicant has previously discussed, the mine rope guide tensioning device of David et al. is unrelated to the present invention since it operates at the upper end of the rope as opposed to functioning as a fall arrest "bottom" anchor system utilized at the bottom end of a safety line. More specifically, the tensioning structure of David et al. has the rope R that extends downwardly from the clamping gland 10 and the nut 11 that is adjusted to control tension operates at the upper end of the torque tube 4 unlike the present invention where the load setter of the tensioner bears against the underside of the fixed bracket to provide line tension adjustment of the upwardly extending safety line that is adapted to be utilized with the bottom anchor assembly.

Applicant also respectfully traverses the rejection of claims 1 and 12 under 35 U.S.C. 103(a) as being unpatentable over United States patent 4,854,185 Lichtenberg et al. in view of French patent publication 2691224 Pillas. It is respectfully submitted that claim 1 and its dependent claims distinguish over Lichtenberg et al. in a non-obvious manner for reasons which have previously been discussed as more specifically set forth below. As discussed above, the present invention involves a fall arrest "bottom" anchor assembly adapted

for use with a generally vertical safety line as opposed to a cable connector of the type disclosed by Lichtenberg et al. that is for use in an automotive engine control. As discussed above, Applicant's claim 1 and hence its dependent claims recite a gripper including a manually adjustable clamp that can be clamped to the safety line at an adjustable position along its length. On the other hand, Lichtenberg et al. discloses a cable strand end fitting including a retainer 20 that is staked (i.e., crimped) at one end of the strand 18 as discussed in Lichtenberg et al's. column 2, line 38. Such a retainer member that is staked or crimped to a cable does not permit manually adjustable clamping that is necessary with the present invention so as to be capable of functioning as a bottom anchor assembly with a vertical safety line that extends upwardly. As discussed in the application, this is an important feature of the invention since it permits the bottom anchor assembly to be utilized with structures of different heights while using the same safety line. Furthermore, the manner in which the Lichtenberg et al. retainer member is staked can cause damage to the associated cable which is not acceptable with a fall arrest bottom anchor assembly that is adapted to be utilized with a safety line in the manner claimed. Furthermore, the Pillas reference also discloses both of its embodiments illustrated in Figures 1 and 2 as having an end pieces 5 (Figure 1) and 6 (Figure 2) that are crimped to the wire. While a small amount of adjustment is possible by threading, such a crimped construction is not usable with a fall arrest bottom anchor assembly of the type involved with the present invention where greatly different lengths of the safety line must be adjustably clamped when utilized with structures of greatly different heights. Thus, even if one were to substitute the crimped connection disclosed by Pillas in the Lichtenberg et al. adjuster system, there still would be no provision of the claimed invention.

The rejections of claim 10 and 11 under 35 U.S.C. 103(a) over Lichtenberg et al. when considered with David et al. or British patent specification 917980 Davies are also traversed. Both Lichtenberg et al. and David et al. are discussed above and the Davies reference merely discloses a stop-block for winding ropes without in any way suggesting an adjustable clamp for use with a tensioner of a bottom anchor assembly of a fall arrest system. Applicant respectfully submits that it would not be obvious to modify the automotive cable connector of Lichtenberg et al. in view of either the mine rope upper tensioner of David et al.

or the stop-block winding rope of Davies et al. since these references all involve different uses that are not analogous to the present invention.

Applicant also respectfully traverses the rejection of claims 10/1 and 11 under 35 U.S.C. 103(a) as being unpatenable over Lichtenberg et al. and Pillas for the same reasons discussed above.

It is believed that the objection to the drawings under 35 U.S.C. CFR 1.83(a) is inappropriate for reasons discussed above since the indicator recited in claim 12 is shown by the drawings as element 88 in Figure 4.

As discussed above, Applicant respectfully traverses the Examiner's assertion that all of the claimed elements are taught by David et al. More specifically, as previously stated, David et al. lacks the disclosure of any bracket that is adapted to be fixedly mounted and against whose underside the tensioner bears in order to provide tensioning of a vertically oriented safety line that extends upwardly from the claimed fall arrest bottom anchor assembly. The Examiner's cobbling of bits and pieces from the prior art in an attempt to reject the claims results from his hindsight and involves such extensive modification and combining as to demonstrate the non-obvious nature of the present invention.

For the reasons set forth above, it is respectfully submitted that this application is in an allowable condition such that it is appropriate to hereby respectfully its allowance.

Respectfully submitted,

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